



Genetic variability in three populations of *Hypostomus hermanni* (Teleostei: Loricariidae) found in the basins of Ivaí River, Tietê River, and Sapucaí-Mirim River of Brazil

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ABSTRACT. The genetic variability in three populations of *Hypostomus hermanni* from the tributaries of the rivers Ivaí (Keller), Tietê (Piracicaba), and Sapucaí (Sapucaí-Mirim) was determined using electrophoresis on starch gel. The variability in the genes for eight enzymes, namely, aspartate aminotransferase (EC 2.6.1.1), glucose-6-phosphate isomerase (EC 5.3.1.9), glycerol-3-phosphate dehydrogenase (EC 1.1.1.8), isocitrate dehydrogenase (EC 1.1.1.42), L-lactate dehydrogenase (EC 1.1.1.27), malate dehydrogenase (EC 1.1.1.37), malate dehydrogenase NADP⁺ (EC 1.1.1.40), and phosphoglucomutase (EC 5.4.2.2), was assessed. Three loci with seven alleles were obtained in the population of Keller River whereas eight loci with 20 alleles and six loci with 16 alleles were present in the populations of Piracicaba and Sapucaí-Mirim rivers, respectively. Individuals analyzed in the

three watersheds presented all the detected polymorphic loci. The average heterozygosity was 0.0527, 0.1742, and 0.1299 in the Keller, Piracicaba, and Sapucaí-Mirim River populations, respectively. On the basis of identity values and genetic distances, all the three populations were determined to be genetically very similar.

Key words: Genetic variability; Hypostominae; Isoenzymes; Neotropical fishes